

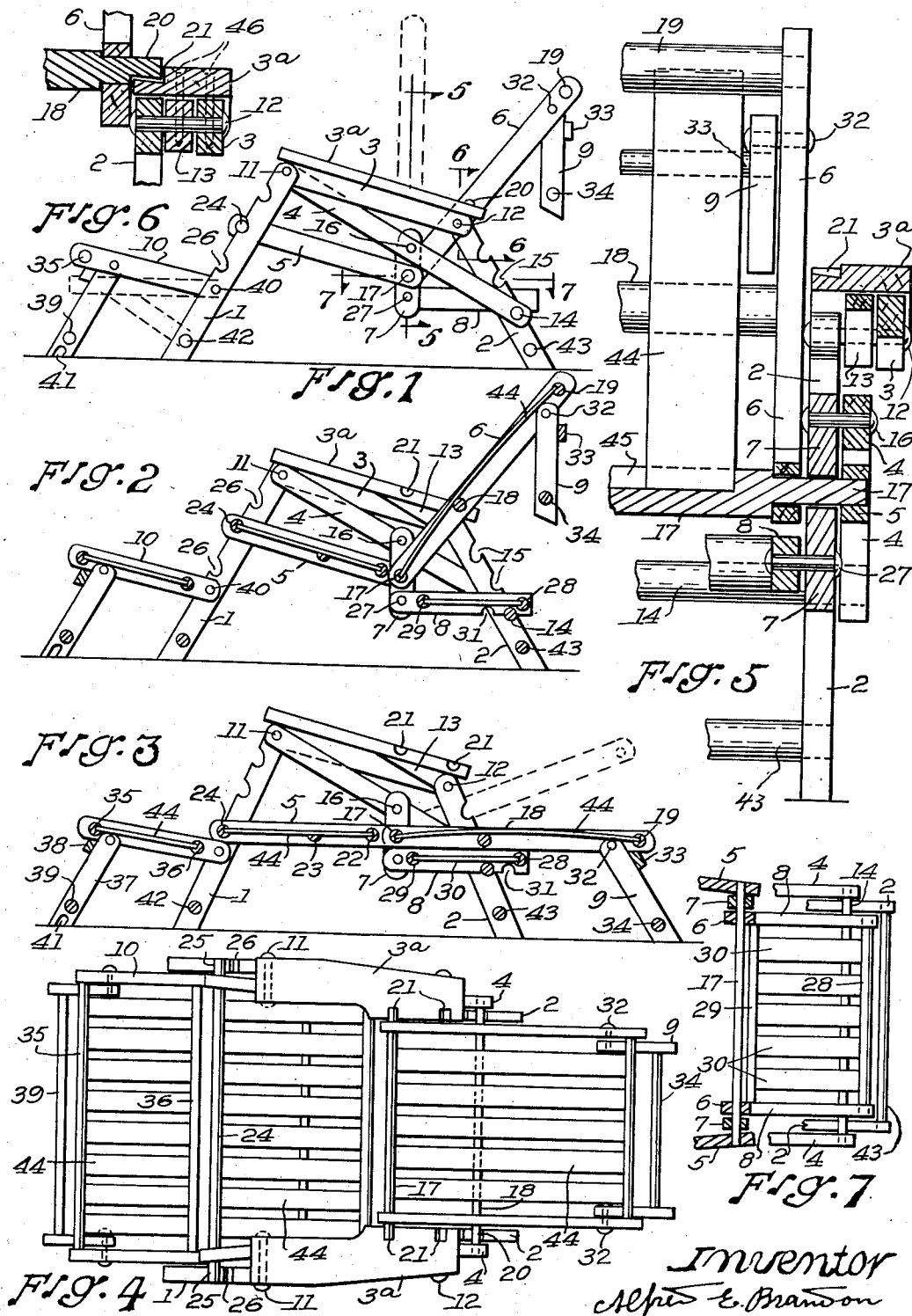
Feb. 28, 1939.

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2,148,898

BEACH AND LAWN CHAIR

Filed Sept. 17, 1937



UNITED STATES PATENT OFFICE

2,148,898

BEACH AND LAWN CHAIR

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Application September 17, 1937, Serial No. 164,282

5 Claims. (Cl. 155—49)

This invention relates to chairs of the collapsible type, used at beaches, pleasure resorts, deck or lawn or the like.

In foldable chairs heretofore constructed the pivotal connection between the seat and back rest commonly is supported on the rear legs. Such a chair affords but few adjustments for the back rest, as the adjustment of the back rest is limited by the arm rests to which it is pivotally connected. Also, when the back rest frame is in the extreme reclining position there is the tendency of the chair to topple over rearwardly with the user of the chair therein.

And it is therefore one of the main objects of this invention to provide a chair having link elements pivoted to the side frames for suspending the pivotally connected ends of the seat and back rest. This facilitates unlimited adjustments of the seat, and back rest, which are supported on the side frames, so as to insure increased comfort and safety to the user.

Another object of this invention is to provide a collapsible chair with a leg frame pivoted to the back rest to constitute a substantial vertical support at the free end of the back rest when the back rest is lowered to convert the chair into a cot.

At beaches, on lawns or on the like locations, it is often found desirable to have a safe place, other than the beach or ground, to support garments, books, and other articles. The foot rest, seat, arm rests and back rest of the chair now in use, have been used to place many articles on, thereby causing great inconvenience to the user of the chair. It is therefore a still further object of this invention to provide other and more convenient means, embodied in the chair, to support garments and other articles whereby these articles may be kept free of the beach and ground surrounding the chair.

Still another object of the invention is to provide a chair having a frame structure which is well braced and adaptable to all users regardless of weight and size and assures safety in any adjusted position of the device as a chair or as a cot.

Other and further objects and advantages of this invention will be apparent as the description proceeds.

The accompanying drawing shows, for purposes of illustrating the present invention, one embodiment in which the invention may take form, together with modification of certain parts, it being understood that the drawing is illustrative of the invention rather than limiting the same.

In the drawing:

Fig. 1 is a side elevational view of the chair constructed according to the invention, the vertical dotted lines indicating the back rest frame in vertical position.

Fig. 2 is a longitudinal and vertical sectional view of Fig. 1.

Fig. 3 is the same as Fig. 2, but the seat and back rest frames are in the position they assume when the chair is converted into a cot, the dotted lines indicating another position of the back rest frame, which is mostly desired by invalids or sick persons.

Fig. 4 is a plan view of the chair shown in Fig. 1, when it is positioned and used as a cot.

Fig. 5 is an enlarged sectional view of the chair along the line 5—5 of Fig. 1.

Fig. 6 is an enlarged sectional view, taken along the line 6—6 of Fig. 1.

Fig. 7 is a horizontal sectional view along the line 7—7 of Fig. 1.

As shown, the arm rest 3 at the front end is pivoted with the front frame 1 and diagonal brace frame 4 by means of bolt or rivet 11, and at the rear end is pivoted with the rear frame 2 by means of bolt or rivet 12, and a spaced member 13 is disposed between the arm rest and side frame and it is in alignment with the diagonal brace frame. 14 is a cross bar which connects the sides of the diagonal brace frame and is adapted to fit into recesses 15, provided in the rear frame, so that the diagonal brace frame braces the rear frame from the arm rest.

A right and left link element 7 are pivoted to the brace frame 4 by means of bolts or rivets 16 and are in alignment with the rear frame side members.

The back rest frame is provided with cross bars 17, 18 and 19. Cross bar 17 pivotally connects the link elements 7 and also inner end of the seat frame 5 and is so arranged as to facilitate movements of the back rest, the seat and also link elements.

20 are projections of the cross bar 18 and, are adapted to fit into recesses 21, provided on each arm rest portion 3a as well as in recesses 15 of the rear frame.

The seat frame is provided with cross bars 22, 23, 24 of which 24 is provided with outward projections 25, adapted to fit into recesses 26 and adjustably secure the seat to the front frame in any desired position.

Both link elements 7 extend downward and pivotally connect one end of the horizontal brace frame 8 by means of bolts or rivets 27. The hori-

zontal brace frame 8, having cross bars 28 and 29, with slats 30 secured to same, and a plurality of recesses 31, is adapted to fit at the free end over cross bar 14 of the diagonal brace frame 4 thus tying the lower end of the link elements 7 to the rear frame in any position which it may be. It (8) also prevents the free end of the diagonal brace frame 4 from accidental misplacement and, furthermore, it functions as an extension of the seat to form a brace therewith between the front and rear legs, and also forms an intermediate support beneath the back rest in horizontal condition, as shown in Fig. 3.

The horizontal brace frame 8 is constructed to provide an area on which articles may be placed and protected free from the beach or ground or floor area. Also, it may be constructed to serve as an additional seat when the back rest frame is positioned as shown in dotted lines of Fig. 1.

Rivets or bolts 32 secure the leg frame 9, preferably, within the back rest frame. A slat or bar 33 projects from the sides substantially to check and support the back rest frame 6 when in horizontal position, as illustrated in Fig. 3; and a cross bar 34 connects the sides at the free end. Leg frame 9 may be provided with means such as a hook or catch (not shown) to hold or secure it in place within the back rest frame when the chair is not used as a cot. However, it is constructed to serve a dual purpose of the invention, in that it is to provide racks where articles such as towels, shawls or other light garments may be placed and protected free from the beach or ground. Cross bars 33 and 34 serve as hangers or racks for said articles. Obviously, additional cross bars may be provided for additional racks between cross bars 33 and 34.

The foot rest 10 comprising cross bars 35 and 36, and an inner frame 37, having top slat 38 and bottom cross bar 39, is constructed in the usual well known manner, and is secured by bolts or rivets 40 to the front frame. It will be noted, that the position of the foot rest is inwardly inclined rather than outwardly for the natural position of the feet of user in sitting position, and it is adapted to be adjusted into horizontal position by providing recesses 41 at the ends of the inner frame 37 to fit over cross bar 42 of the front frame, as is shown in dotted lines in Fig. 1. 43 is a cross bar connecting the legs of the rear frame. The foot rest, seat, and also back rest panels may be constructed with slats 44, secured in grooves 45, in the usual well known manner.

In Fig. 6, is shown the projection 20 of the cross bar 18 in recesses 21. The connection is in the form of a dovetail joint to prevent spreading of the arm rest. Obviously other means may be employed to adjustably secure the back rest frame to the arm rests. Also, the arm rest 3 and spaced member 13 are secured to portion 3a by means of screws or rivets 46.

It is believed, that the foregoing conveys a clear understanding of the objects prefaced above.

While in describing the invention, I have referred in detail to form, arrangement and construction of the various parts thereof, the same is to be considered, only as illustrative, so that I do not wish to be limited thereto except as may be specially set forth in the appended claims.

And I claim as new:

1. The combination in a collapsible chair, a front frame, a rear frame spaced therefrom, arm rests pivotally connecting said frames at their upper ends, and brace members between the front and rear frames, said brace members being piv-

oted to the upper end of the front frame and adjustably connected with the lower portion of the rear frame, link elements pivoted to the brace members, pivotally connected seat and back rest frames pivotally connected with the link elements, cooperative locking means between the front frame and the front end of the seat frame to hold up and downward various positions of the seat frame thereto, and more cooperative locking means between the arm rests, and back rest frame and the latter and the rear frame to secure the back rest frame in position at the arm rests and also at the rear frame independently.

2. In a collapsible chair, the combination as in claim 2, a foot rest frame normally in an inward inclined position when the structure is set up as a chair, said foot rest frame having one end pivoted intermediate the upper and lower ends of the front legs of the structure so that, when the structure is positioned as a chair said pivoted end is at a distance from the seat frame and when the back rest frame and seat frame are in alignment the free end of said foot rest frame is also positioned substantially in alignment therewith and the pivoted end contacts the front end of the seat frame from below.

3. The combination in a beach and lawn chair, a pair of spaced sides each comprising front and rear legs, recesses in the front and rear legs, an arm rest pivoted to the upper end of each of the front and the rear legs, a side brace having one end pivoted to the pivotal connection of the front leg and arm rest and the other end adjustably connected with a rear leg, a link element pivoted to a side brace, a cross bar connecting the link elements and uniting also the spaced sides, other cross bars uniting the spaced sides at their rear and front legs, a back rest frame and a seat frame both pivotally connected to said cross bar of the link element and the link elements being interposed between the back rest and seat frame side rails, projections on the back rest frame to engage the said recesses on the rear legs when the back rest frame is below the arm rest and, other recesses on the arm rests to engage with said projection when the back rest frame is moved from the rear legs, projections on the front end of the seat to engage the said recesses on the front legs and adjustably hold the front end of the seat in many positions on the front legs, brace means below the seat frame, said brace means comprising a pair of spaced bars each pivotally connected with a link element and adjustably attached with the free end of the said side braces so that the rear legs are braced from the link element and the front legs are braced by the seat frame, cross elements connecting the spaced bars to complete a frame to support articles of the character described, and a supplemental leg frame having one end pivoted to the sides of the back rest frame so that, when the chair is in extended position as a cot said supplemental leg frame supports and braces the back rest frame from the free or outer end thereof or inner end being supported by the said pair of spaced bars and link elements respectively.

4. The combination in an adjustable reclining chair and cot, connected front and rear legs, arm rests each pivotally connected with a front and a rear leg upper end, side braces positioned diagonally from the front legs to the rear legs, said braces each pivotally connected with the front legs and adjustably secured with the rear legs, link elements pivoted to the said braces, pivotally connected front seat and back rest frames united

to said link elements intermediate both ends of the link elements, locking means between the arm rests and back rest and the latter and the rear legs uniting the back rest frame in many positions on the arm rests and also rear legs independently, cooperative locking means between the front side of the front legs and the front end of the front seat frame to secure up and downward various positions of the front seat frame thereto, a supplemental rear seat frame having one end pivoted to the link elements lower end and the other end adjustably connected between the said rear legs so that, when the structure is set up as a chair said rear seat frame braces the said front seat frame and also the link elements to the rear leg lower portions and serves also as shelf element and, when said structure is converted from a chair to a cot, said rear frame functions also for supporting the side rails of the back rest frame between the ends, and a foot rest frame normally in an inclined position substantially parallel with the front seat frame, said foot rest frame having one end pivoted to said front legs intermediate the upper and lower ends of the front legs so that, when the back rest frame side rails are lowered upon the side rails of the rear seat frame the said front seat frame is above and parallel with the rear seat frame and it is positioned in alignment with the back rest frame and the foot rest frame front and is also positioned substantially in alignment therewith the pivoted end of the foot rest frame contacting and also supporting the front end of the front seat frame.

5. A combination adjustable reclining chair and cot comprising, connected front and rear legs, arm rests each pivotally connected with a front and a rear leg, side braces pivotally con-

nected with the front legs and adjustably secured with the rear legs, link elements at their upper ends pivoted to the side braces, pivotally connected seat and back rest frames pivotally united with the link elements, projections intermediate both ends of the back rest frame side rails, said projections adapted to engage the arm rests and also the rear legs, locking means spaced in the upper portion of the arm rests to receive the said projections and adjustably secure the back rest frame at each spaced means with the arm rests and, said projections and spaced means formed with cooperative means to prevent accidental spreading of the arm rests, and locking means in the rear legs to receive the said projections when the back rest frame is below the arm rests, projections at the front end of the seat frame and, locking means spaced in the front legs to receive the projections of the front end of the seat and adjustably secure the front end of the seat frame at each spaced means with the front legs, a pair of horizontal brace elements having one end pivoted to the link elements and the other end adjustably secured to the rear legs and, a plurality of cross elements connecting the said horizontal brace elements to complete a frame adapted to tie the rear leg lower portions with the link elements and seat and also to serve as a shelf element, and a supplemental leg frame having one end pivotally connected with the sides of the back rest frame free or upper end, said supplemental leg frame comprising a pair of side rails and, a plurality of spaced cross bars between the side rails to serve as rack elements when the structure is set up as a chair.

ALFRED E. BRANDON.

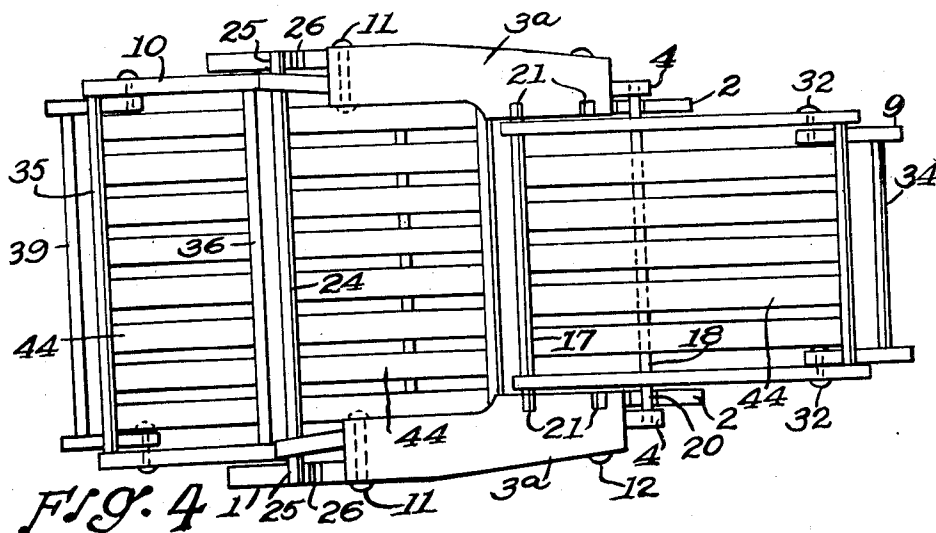
CERTIFICATE OF CORRECTION.

Patent No. 2,148,898.

February 28, 1939.

ALFRED E. BRANDON.

It is hereby certified that error appears in the above numbered patent requiring correction as follows: In the drawing, Figure 4 should appear as shown below instead of as in the patent -



page 2, second column, line 15, claim 2, for the claim reference numeral "2" read 1; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 23rd day of May, A. D. 1939.

Acting Commissioner of Patents.

(Seal).